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APPLICATION NO.	PPLICATION NO. FILING DATE  09/379,702 08/24/1999		FIRST NAMED INVENTOR HISASHI OHTANI	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/379,702				07977/093002	
20985	7590	08/19/2003		•	
FISH & RICHARDSON, PC 4350 LA JOLLA VILLAGE DRIVE SUITE 500				EXAMINER	
				LEE, EUGENE	
SAN DIEGO	O, CA 92	122		ART UNIT PAPER NUMBER	
				2815	
				DATE MAILED: 08/19/2003	,

Please find below and/or attached an Office communication concerning this application or proceeding.

		A	Um							
~		Application No.	Applicant(s)							
		09/379,702	OHTANI ET AL.							
	Office Action Summary	Examiner	Art Unit							
		Eugene Lee	2815							
Period fo	The MAILING DATE of this communication appears on the cover sheet with the c rrespondence address Period for Reply									
THE - Exte after - If the - If NC - Failt - Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period we use to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing end patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may within the statutory minimum of vill apply and will expire SIX (6) N cause the application to become	a reply be timely filed  hirty (30) days will be considered timely.  ONTHS from the mailing date of this communication.  ABANDONED (35 U.S.C. § 133).							
1)⊠	Responsive to communication(s) filed on 16 J	uly 2003 .								
2a)□	<u> </u>	is action is non-final.								
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.										
Disposit	ion of Claims		·							
4)⊠	Claim(s) 45-64 is/are pending in the application	n.								
	4a) Of the above claim(s) is/are withdraw	vn from consideration.								
5)[	Claim(s) is/are allowed.									
6)⊠	Claim(s) <u>45-64</u> is/are rejected.									
7)	Claim(s) is/are objected to.									
,	Claim(s) are subject to restriction and/or	r election requirement.								
	ion Papers									
•	The specification is objected to by the Examiner		u. E. a. dana							
10)	The drawing(s) filed on is/are: a)☐ accep									
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).										
11)	11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.									
If approved, corrected drawings are required in reply to this Office action.										
12) The oath or declaration is objected to by the Examiner.  Priority under 35 U.S.C. §§ 119 and 120										
-	••	nriority under 35 LLS (	: 8 119(a)-(d) or (f)							
•	13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a)⊠ All b)□ Some * c)□ None of:									
a,	1. Certified copies of the priority documents have been received.									
	<ul> <li>2.</li></ul>									
	3. Copies of the certified copies of the priority documents have been received in this National Stage									
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.										
14) 🗌 /	Acknowledgment is made of a claim for domesti	c priority under 35 U.S.	C. § 119(e) (to a provisional application).							
<ul> <li>a) ☐ The translation of the foreign language provisional application has been received.</li> <li>15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.</li> </ul>										
Attachmen	at(s)									
2) Notic	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice	w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152)							

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#### **DETAILED ACTION**

### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/16/03 has been entered.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 45 thru 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamazaki '132 in view of Matsumoto '084. Yamazaki discloses (see, for example, FIG. 3) a thin film transistor (semiconductor device) comprising a substrate 1, non-single-crystal semiconductor layer (crystalline semiconductor island) 2, gate insulating film 3, and gate electrode 5G. The gate insulating film comprises a first insulating film with a side aligned with a side of the single-crystal semiconductor layer 2. Yamazaki does not disclose a gate insulating film comprising a second insulating film extending beyond an edge of the first insulating film. However, Matsumoto discloses (see, for example, FIG. 1) a thin film semiconductor device comprising a thin film transistor 2 wherein the thin film transistor comprises a gate insulating

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film (second gate insulating film) 19 that extends all the way across a semiconductor device. In column 4, lines 47-49 and lines 65-68, Matsumoto discloses the gate insulating films may be silicon oxide or silicon nitride. In column 5, lines 28-56, Matsumoto teaches that such an arrangement will increase the on-voltage and suppress the increase in current consumption. Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to include the gate insulating film 19 of Matsumoto to extend all the way across the thin film transistor in Yamazaki's invention in order to increase the on-voltage and suppress the increase in current consumption.

## Response to Arguments

Applicant's arguments with respect to claims 45-64 have been considered but are moot in 4. view of the new ground(s) of rejection.

## INFORMATION ON HOW TO CONTACT THE USPTO

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugene Lee whose telephone number is 703-305-5695. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eddie C. Lee can be reached on 703-308-1690. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and 703-308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Eugene Lee

B. WILLIAM BAUMEISTER PRIMARY EXAMINER